Mitigate, tolerate or relocate? Offshoring challenges, strategic imperatives and resource constraints

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Offshoring Challenges, Strategic Imperatives and Resource Constraints

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Abstract

This paper examines key firm-level factors influencing initial strategic responses to offshoring implementation challenges. Comparative case findings indicate that firms are likely to try to mitigate challenges if they perceive to have control over their cause; if strategic objectives are diverse; and if firms have abundant resources available. By comparison, firms tolerate challenges if cost is a strategic imperative, or if resource endowments are limited. Firms relocate operations temporarily or permanently in particular if challenges are externally caused, whereby temporary relocation requires investments into flexible global infrastructures. Findings reveal critical contingencies of capability development and learning in offshoring and beyond.

Key Words: global sourcing, outsourcing, implementation, risks, learning, experience, capabilities

Introduction

Offshoring, i.e. sourcing of administrative and technical work from outside the home country in support of both domestic and global operations, has become a mainstream business practice (Doh, 2005; Manning et al., 2008; Kenney et al., 2009). Over time, firms have expanded both the scale and scope of offshored business processes, ranging from more standardized services, such as IT (Henley, 2006) and HR (Pereira & Anderson, 2012), to knowledge work (Lewin et al., 2009). However, despite growing offshoring experience across industries, firms continue to face various operational challenges, ranging from low service quality (Narayahan et al., 2011) and data security issues (Luo et al., 2010), to finding qualified personnel (Manning et al., 2012) and employee turnover (Demirbag et al., 2012). This article seeks to better understand how firms initially respond to such challenges, and how differences in responses relate to perceived control over the cause of a challenge, the strategic orientation of the firm, and resource endowments.

Despite growing knowledge about typical offshoring implementation challenges (see e.g. Lahiri et al., 2012), we still know relatively little about how firms *respond* to the encounter of such challenges (e.g. Bunyaratavej et al., 2011). Most studies have focused on how firms anticipate and mitigate perceived risks *before* launching particular projects. For example, studies indicate that data security risks are often

mitigated by choosing captive over external governance models (Mudambi & Tallman, 2010; Luo et al., 2013), and that location-specific risks, such as political instability, are mitigated by selecting less 'risky' locations (Doh et al., 2009; Hahn et al., 2009). However, studies indicate that several challenges, such as coordination problems and employee turnover, are often unanticipated and occur only *after* offshoring decisions are made (Vlaar et al., 2008; Jensen, 2009).

More recently, studies have shifted emphasis from ex-ante risks to processes of learning and capability development (Jensen, 2009, 2012; Lahiri et al., 2012). One main finding is that firms learn by experience to increase performance, e.g. through better training, process integration and coordination across units (Luo et al., 2010; Jensen, 2012). Most studies share the notion that firms gain experience over time, and thereby develop problem-solving capabilities 'semi-automatically' (see e.g. Zollo & Winter, 2002). Other studies however question this assumption. For example, Massini et al. (2010) find that, independent of experience, differences in strategic attention may affect offshoring performance. In more general, research on capability development suggests that effective firm learning not only depends on accumulated related knowledge (March, 1991), but on whether challenges are internal or external to the firm (Oliver, 1991); strategic goals and priorities (Helfat & Peteraf, 2003), and the availability of resources needed to invest into capabilities (Kogut & Kulatilaka, 2001).

Based on these insights, this study investigates, using a comprehensive multi-case study of early offshore implementation projects of U.S.-based firms, how strategic objectives, available resources and perceived degree of control over the cause of a challenge affect initial organizational responses, whereby mitigation is treated as only *one* possible response. In order to control for the intervening role of experience, this study specifically compares firms with little prior experience when facing particular challenges. Also, to avoid a large firm bias, this study compares firms across different sizes. Findings indicate that firms respond to challenges in mainly three different ways: mitigating, tolerating or relocating. If a firm perceives to have control over the cause of a challenge (= internal challenge),

mitigating or tolerating are likely responses; if challenges are perceived to be caused by factors outside of a firm's control (= external challenge), tolerating or relocating become more likely. However, mitigation attempts are most likely if offshoring projects are guided by diverse strategic objectives rather than just cost, and if firms have abundant resources available. In other cases, i.e. if cost objectives dominate or if resources are limited, firms tend to tolerate challenges, or relocate in response to particularly external challenges. Yet, some firms choose to relocate temporarily rather than permanently, whereby the former requires prior investments into global firm infrastructures which are more likely to happen if strategic objectives are diverse and if sufficient resources are available. Findings have important implications both for offshoring research and research on capability development in international business and beyond.

The article continues with a review of prior research on offshoring challenges and firm responses. Three main firm-level factors are discussed: perceived control over the cause of a challenge; firm strategic orientation; and resource endowments. Then, data and method of this explorative multi-case study are introduced, and findings are presented. The article concludes with theoretical propositions and broader implications for theory and managerial practice.

Responses to Offshoring Challenges: A Review and Critique of Prior Literature

The identification of operational risks and challenges has been a key dimension of research on offshoring (see e.g. Rilla & Squicciarini, 2011). Risks denote *ex-ante* perceptions of *potential* obstacles prior to making a decision (March, 1994). Challenges, by contrast, occur *ex-post* and cause negative deviations between expected and actual performance (Harrison & March, 1984). While many offshoring studies have focused on risks (see e.g. Hahn et al., 2009; Luo et al., 2013), this study focuses on challenges *after* offshoring decisions are made. This is because firms often do not or insufficiently anticipate operational challenges, such as coordination problems (Levina & Vaast, 2008) and employee turnover (Demirbag et al., 2012). It

is therefore critical to better understand what causes operational challenges and how firms respond to them.

Challenges can be categorized as internal or external. *Internal* challenges are largely caused by factors within the firm or within client-provider relationships. Examples include internal resistance (see e.g. Lewin & Couto, 2007); miscommunications between internal clients and offshore staff (e.g. Vlaar et al., 2008; Hanna & Daim, 2009); and service quality problems (Leonardi & Bailey, 2008; Manning et al., 2013). *External* challenges, by comparison, are typically caused by factors outside of the control of the organization. They do however affect the firm's operations and performance. Examples include insufficient intellectual property protection (Hahn et al., 2009); and limited labor market size or outdated higher education affecting the availability of high-skilled labor (Manning et al., 2012). Notably, some challenges can have both internal and external causes. High employee turnover, for example, is often driven by lack of financial and career incentives within the organization, but also lack of loyalty and external job opportunities (Demirbag et al., 2012).

What we know about responses: The role of experience, task features and local environment

Several studies have started to analyze firm responses to offshoring challenges. With respect to *internal* challenges, several studies indicate how service quality problems are mitigated by coaching, personnel rotation and interface managers who help communicate tasks (e.g. Srikanth & Puranam, 2011; Manning et al., 2013). Other studies show how loss of managerial control and operational inefficiencies are often managed by improving process and personnel integration (Luo et al., 2010; Narayanan et al., 2011). With respect to *external* challenges, most have been looked at primarily as ex-ante risks (Hahn et al., 2009). A few studies, however, have dealt with ex-post management of external challenges. Manning et al. (2012) show for example how challenges in finding qualified personnel are mitigated by joint ventures with local universities. Other studies have indicated how pioneer foreign investors, e.g. Texas Instrument in India

(Patibandla & Petersen, 2002) or Motorola in Argentina (Manning et al., 2010), have responded to underdeveloped local business contexts, e.g. lack of satellite connections in India or lack of software process standards (CMMI) in Argentina, by shaping policies of local authorities and capabilities of local providers and industry associations (see also Dossani & Kenney, 2007).

The underlying assumption of most prior studies is that firms are not only *motivated* to mitigate operational challenges, but that they develop the *capability* to do so over time. This view is rooted in the notion that mitigation capabilities may develop 'semi-automatically' through *experience* and problem-driven organizational learning (Zollo & Winter, 2002; Nickerson & Zenger, 2004). Whereas a number of studies (e.g. Jensen, 2009, 2012) convincingly show that firms develop offshoring capabilities through experience, other studies indicate that even experienced firms often continue to face operational challenges, such as service quality (Manning et al., 2013). What's more, some operational challenges, such as employee turnover, may even *increase* as firms grow offshore operations (Heijmen et al., 2009; Demirbag et al., 2012). In turn, research suggests that firms with little experience seem to manage certain challenges much better than others (Lewin & Couto, 2007). I seek to better understand why this is, by focusing on firms that encounter – and respond to – challenges with *little prior experience*. By doing that, I exclude the somewhat fuzzy experience factor and focus on conditions that can explain how likely firms will invest into mitigation capabilities in the first place.

Beside experience, prior research has explored two other major contingencies: task features and the local environment. As for *task features*, one major argument has been that task complexity and knowledge intensity trigger operational challenges and difficulties in responding to them effectively. For example, the more complex the task, i.e. the more interdependencies and interfaces there are between sub-processes, the more difficult coordination and communication will become (e.g. Kumar et al., 2009; Larsen et al., 2012). Similarly, knowledge intensity, including the need for tacit knowledge, has been associated with difficulties in specifying tasks and monitoring service delivery (Brusoni, 2005; Gerybadze

& Reger, 1999; Gertler, 2003). As for the *local environment*, studies have pointed out that change dynamics and uncertainty have an influence on the effectiveness of strategic choices, including approaches to mitigate operational challenges (Pfeffer & Salancik, 1978; Peng, 2003). For example, the effectiveness of lobbying to secure favorable business conditions (e.g. taxes) depends a lot on the stability and/or predictability of political decision-making processes. As another example, the degree to which intellectual property is legally protected in a country may affect approaches towards hiring and data security (see also Child & Tsai, 2005; Von Zedtwitz, 2004).

However, even though task features and environmental factors may have an effect, they do not *determine* firm responses to operational challenges. Rather, following Child's (1972) notion of 'strategic choice', firms respond *differently* to challenges, even if tasks are similarly standardized or complex, or if firms operate in similarly challenging environments (see also Oliver, 1991). In fact, prior studies suggest how idiosyncratic firm responses to challenges, such as service quality, can be (see e.g. Vlaar et al., 2008; Leonardi & Bailey, 2008). Yet, these firm-specific differences cannot be entirely explained by level of experience either. As we see below, even firms without or with little prior related experience may respond differently to incoming operational challenges.

What we need to know: The role of firm control, strategic orientation, and resource endowments

In this explorative study, I first of all broaden the perspective from mitigation responses to potential *other* responses firms may choose to the encounter of challenges. These responses will be derived from empirical data. In addition, I focus on three important, yet previously neglected firm-level contingencies of initial responses to offshoring challenges: perceived firm control over the cause of the challenge, strategic orientation and resource endowments. I will introduce them in detail next.

First, this study considers perceived firm control over the cause of a challenge as an important condition for firm responses. Earlier a distinction was made between 'internal' and 'external' challenges

based on the degree to which firms control the cause of a challenge. Indeed, prior research suggests – albeit implicitly – that the source of a challenge may affect how firms respond to it. Whereas internally caused operational problems are often dealt with directly through solutions in the form of adaptive routines and procedures (see e.g. March, 1991; Weick & Roberts, 1993), externally caused challenges can often not be addressed directly. They may require 'political management' (Oliver & Holzinger, 2008) or other forms of engagement in the local offshoring context (Manning et al., 2012). As shown above, most offshoring-related studies have focused on *internal* challenges, whereas *external* challenges have been treated mostly as risks which need to be 'mitigated' ex-ante, e.g. by avoiding 'risky' locations (see e.g. Doh et al., 2009; Hahn et al., 2009). This suggests that the distinction between internal and external challenges might be important. However, the extent to which a firm has control over a challenge is not just a matter of where control is 'objectively' located, but to what extent control is *perceived* to be external or internal by any particular firm (see for this dynamic also Pfeffer & Salancik, 1978). As I show further below, this perception may influence the way firms respond to certain operational challenges. Thus, one specific empirical question is: How does the perceived degree of firm control over the cause of an offshoring challenge affect firm responses?

Second, prior research on organizational capabilities suggests that strategic goals may strongly influence the way and extent to which firms learn and develop capabilities. In the offshoring literature, Massini et al. (2010) show that the level of strategic attention given to offshoring projects influences offshoring performance. In more general, strategic goals have been identified as important drivers and catalysts for learning and capability development (Helfat & Peteraf, 2003; Aldrich & Ruef, 2006). This is because capability development is driven by aspiration levels and what Simon (1956) famously called 'satisficing' (see also Winter, 2000). This means that firms typically do not seek to address every possible issue, but that they take action primarily to satisfy expectations and meet primary performance objectives. In a similar fashion, Ocasio (1997) argued that strategic objectives are important means of

guiding managerial attention to problem solving and decision-making. Because of bounded rationality (Simon, 1955), managerial attention to organizational issues is necessarily selective, whereby strategic goals serve as important selection filters. Manning et al. (2012) show for example how a German engineering firm set up an offshore engineering center in Romania, and how they launched a large collaboration with a local university to secure talent supply. However, despite related offers from the local university, this collaboration was not extended to include joint R&D projects, mainly because the firm's strategic priority was to hire cheap offshore engineers, rather than engage in joint R&D projects. This example also shows that only because firms have related capabilities at home (e.g. of running R&D projects with universities), this does not mean that they are utilized offshore, not least because of strategic priorities. Strategic orientations can thus be expected to not only guide managerial attention when facing opportunities, but likewise when facing operational challenges. The question is: How do different strategic orientations affect firm responses to offshoring challenges?

Third, prior studies indicate that capability development is affected by resource endowments, including human and financial resources that are needed to invest into capabilities (Kogut & Kulatilaka, 2001). Accordingly, some recent studies in offshoring show that firm size (as an indicator of resource endowments) strongly affects the likelihood that certain challenges occur (see e.g. Roza et al., 2011). Yet we do not know how resource endowments may also affect *responses* to challenges. Prior studies have touched on this topic only indirectly. For example, maybe not by accident, almost all firms whose effective responses to external challenges have been studied happen to be large firms, e.g. IBM and Texas Instrument in India (Patibandla & Petersen, 2002) and Motorola in Latin America (Manning et al., 2010). Reflecting upon this observation, this study includes not only large, but also midsize and smaller firm cases to get a more nuanced picture of how 'size' and related resource endowments matter in managing operational challenges. Importantly, resource endowments thereby need to be differentiated from 'idiosyncratic resources' as understood by the resource-based view (Barney, 1991). Whereas the latter

denote often historically rooted, socially complex, tacit and hard-to-imitate assets and capabilities, I focus on the availability of financial, human and other allocative resources which a firm can dedicate to solving particular problems. Also, whereas the development of 'idiosyncratic resources' strongly correlates with experience, resource endowments can be seen as a facilitating or constraining factor prior to gaining relevant experience (Kogut & Kulatilaka, 2001). My question therefore is: How do resource endowments affect firm responses to offshoring challenges?

In sum, whereas prior studies have identified various mitigation responses to offshoring challenges based on experience, task features and the local environment, this study will broaden the view by exploring how firms initially respond to challenges with no or little prior experience. Also, rather than taking mitigation for granted, various other responses will be considered. I thereby explore the previously neglected role of perceived control over the cause of a challenge, strategic orientation, and resource endowments as potentially critical contingencies of firm responses.

Data and Methods

My analysis of firm responses to offshoring implementation challenges follows a multi-case study design (Yin, 2003). It focuses on the effect of particular contingencies – perceived firm control, strategic orientation and resource endowments – on responses to implementation challenges when firms have no or little prior experience with these challenges. Results from this study can be used to assist theory-building as they help derive and inter-relate theoretical constructs and categories for future research (Eisenhardt, 1989; Siggelkow, 2007). The main objective however is not to 'generalize' findings in the statistical sense, but to promote 'analytical generalization' (Yin, 2003), by means of crafting propositions based on the case analysis that can be tested in future research.

Further, unlike single case studies, this multi-case study assists a 'generalization in small steps' (Diesing, 1971) through the application of what Yin (2003) calls a 'replication logic'. More concretely, I will

analyze, compare and inter-relate findings across 13 case studies of U.S. firms, based on 37 semi-structured interviews with senior managers involved in offshoring projects (see Table 1). The interviews were conducted in multiple rounds by MBA research teams (see below) between 2010 and 2011 as part of a comprehensive research project on offshoring challenges. The focus was on responses to the first encounter of operational challenges, rather than the anticipation of risks prior to decision-making (see e.g. Hahn et al., 2009). All case firms are U.S.-based which facilitated case access and controlled for extraneous variation with regard to potential country of origin effects, e.g. cultural differences in dealing with managerial control issues (see e.g. Lewin & Couto, 2007).

The first round of case selection and interviewing in 2010 was targeted mainly at small firms, in order to understand if smaller firms share particular challenges that reflect their limited financial and human resource endowments – one of the core contingencies emphasized in this study. In total, 6 out of the 13 firm cases were selected in this first round. Case selection focused mainly on firms with less than 500 full-time employees (FTEs), which at least in the U.S. context are typically considered to be 'small' (see e.g. Lewin & Couto, 2007; Lewin et al., 2009). However, the first round also included one midsize firm, which is categorized as a firm ranging from 500 to 10,000 FTEs, and one large firm, with more than 10,000 FTEs. Interestingly, case findings (of the first round) revealed that in particular when it comes to responding to external challenges, e.g. wage inflation, power outages etc., firm responses in this category were quite similar (see in detail below). Interviewees would at least in part attribute these responses to their size constraints.

Results of the first, very explorative, round of interviewing revealed that besides size, both the strategic orientation of firms and the degree of control they have – or perceive to have – over the cause of a challenge affect responses (see in detail below). Following Yin's (2003) suggestion, I tried to replicate this study in a second round of cases (with different MBA teams). 7 additional cases resulted from this second round. In order to increase the external validity of findings (Yin, 2003) and to sharpen analytical

distinctions, I combined literal and theoretical replication. *Literal* replication, according to Yin (2003), means that the case analysis is replicated for similar cases in order to increase the robustness of findings. The second round therefore also included small firms. *Theoretical* replication aims to expand the variety of cases along relevant criteria – here in particular: firm size – to support prior findings in *opposition* to *different* cases. Therefore, rather than just focusing again on small firms, the second round included more large firms. Besides elaborating the importance of resource endowments, the second round also focused – even more than the first round – on the role of strategic orientation and firm control over the cause of a challenge as response contingencies.

Table 1 gives an overview of all case firms, including information on size, industry, services offshored, offshore locations, and number of interviews. The order of cases in the table is random and does not reflect the order in which data was collected. Firms come from various industries, in particular software, consulting and advertising. Services offshored include tech support, coding, call centers, administrative services and others. Locations include India, China, Russia, Eastern Europe and others. Case firms used both captive and outsourced models, or combinations thereof. In particular in the analysis of the first, more explorative, round of interviews attention was paid to potential intervening effects on responses to challenges coming from task properties, industry, locations and governance mode. However, both the types of challenges encountered and responses seemed strikingly similar across these dimensions, whereas size, strategic orientation and (perceived) firm control seemed to have a significant effect. I should note, however, that this multi-case study focuses on the firm rather than process level. A more fine-grained analysis comparing different projects within each firm may reveal further process-level contingencies (see discussion section).

>>>>>>>>> INSERT TABLE 1 <<<<<<<<<

Interviews were conducted by teams of three or four MBA students assigned to a particular case. Each case ranged from 1 to 7 interviews; interviews would last 30 minutes to 2 hours. In order to ensure and

streamline quality control across teams and to increase reliability, I provided each team with a generic interview guideline including all major questions. Questions included firm-specific details, experiences with offshoring, perceived challenges over time, and responses to these challenges. Interviewers were instructed not to ask interview partners about pre-defined challenges. Rather, an open question design was applied to allow interviewees to bring up challenges from their perspective. Students received a training on how to conduct semi-structured interviews, and on how to follow up on responses. They were also instructed to conduct the interviews as a team, in order to support each other. Prior to the interviews, students not only familiarized themselves with the offshoring/outsourcing trend, but they were also instructed to do a thorough pre-study of the respective firm.

Each research team recorded and transcribed interviews verbatim and created an interview protocol table structured by research questions. In addition, I instructed students to give me access to the recordings, which allowed me to check the validity of transcription data. Students were also asked to give two presentations in class – one on their preparation of the case study, and another one on the actual findings. Both presentations gave me an opportunity to check their level of understanding of the case and their level of preparation for the interviews. In some cases, I gave more thorough feedback and/or I decided to participate in the actual interview as a way to better control the process. My main means of quality control, however, were the interview transcripts. Through the transcripts I also checked the validity of findings across interviews for any particular case. In case of contradicting information, I would consult with the students and/or contact the interview partners directly.

The actual analysis of interviews for this particular study was done by the author of this paper. Though student presentations served as an important preliminary input, a more thorough analysis was done based on the interview transcripts in a three-step process. As a *first step*, discrete challenge-response pairs were coded across cases. For example: One firm reported that in response to low language skills of offshore staff they introduced language tests as part of recruitment. 'Discrete' means that the

interviewee explicitly talked about a particular challenge in terms of what the challenge was about and how the firm dealt with it. Challenges were further categorized as 'internal' or 'external', partly based on prior research, but also based on interview data. The guiding question was to what extent the firm would perceive the challenge to be caused internally (internal challenge), or whether outside factors were perceived to be most important (external challenge). Nuances are important here: For example, some firms framed employee turnover as an 'externally caused' challenge by associating it strongly with wage inflation; others perceived it more as an 'internally' caused challenge by relating it to task features, career progression constraints etc. In any case, it was important that a challenge actually *occurred* in terms of affecting the operations of a firm. By comparison, *potential* risks were not included in the analysis as their recognition would trigger other types of responses.

As a *second step*, responses to challenges were compared and consolidated into different response types across cases, following the strategy of theoretical coding (Charmaz, 2006): The aim of this interpretive process was to identify generic, rather exclusive types. The three main emerging types were: mitigating, tolerating, and relocating. These types were derived entirely from the data, rather than from prior research. Mitigation means that challenges are either prevented from persisting or that their consequences on performance are lowered. Tolerating means that challenges are accepted or treated as given despite their continuous effect on operations. Relocating means that challenges are not dealt with directly, but that firms shift operations to a different location. Later on I make one important modification with regard to the exclusiveness of response types by defining 'temporary relocation' as a 'hybrid' response as it requires supportive mitigation (e.g. building an operational infrastructure across locations). I discuss this special case further below.

As a *third step*, different conceptual categories and codes were interrelated, similar to axial coding (Charmaz, 2006). In particular, following my main objectives, the three main response categories were related to firm size (small, midsize, large), perceived control over the cause of a challenge (internal,

external), and strategic orientation of the firm. With regard to the latter, two main orientations emerged from the data: cost focus vs. diverse strategic objectives. These categories and interrelations then formed the basis for the formulation of theoretical propositions.

I also addressed issues of reliability and validity (Yin, 2003). As for reliability in the data collection process, I used a standard procedure (interview template and data protocol) to increase reliability independent of interviewers. As for the coding of data, challenge-response pairs as identified by the author were double-checked with findings from the student reports. The theoretical consolidation of codes, however, was done entirely by the author. To increase external validity, a replication logic was applied as described earlier through two consecutive rounds of data collection. As for construct validity, emerging constructs (such as response types and response-challenge relations) were partly validated by confronting selected interviewers in the second round of data collection with emerging findings, such as the role of size in affecting responses to challenges. However, there are also limitations. In particular, the main data source are interviews which limits empirical evidence. Notably, my analysis focuses on findings *across* the case population, which somewhat lessens the need for more in-depth data for any particular case. Also, in some cases, follow-up interviews with the same person served to clarify observations and double-check if interpretations were correct.

Next, internal and external challenges as perceived by the case firms are discussed in more detail. After that, firm responses to challenges are discussed. Special attention is paid to the effects of perceived cause of a challenge, strategic firm orientation, and resource endowments. Following the analysis, seven general propositions are developed and discussed for future research.

Findings

Table 2 compares firm responses to offshoring challenges across cases. Each case firm listed in the table is characterized as small (S), midsize (M) or large (L). Challenges are listed by type of response: mitigation,

tolerance, and relocation. Altogether, Table 2 lists 56 discretely reported challenges and responses to them. Although many challenges occur in variation multiple times, they are listed only once (if applicable) for each case firm. Importantly, firm responses to the same challenge may *differ* across firms. What these differences are and why they occur will be discussed below. Table 2 further differentiates between internal and external challenges. Altogether, interviewees reported 31 external and 25 internal challenges. Table 2 already indicates that the distribution of internal vs. external challenges differs by type of response. Among challenges that were – at least partially – mitigated, 17 are internal and 11 are external. Among tolerated challenges, 7 are internal and 9 are external. By contrast, all but 1 challenge leading to relocation decisions are external, i.e. caused by factors outside the control of the firm. Next, particular challenges and responses are discussed in greater detail.

>>>>>> INSERT TABLE 2 <<<<<<<<

Internal vs. external challenges

As defined above, offshoring challenges as encountered by case firms can be categorized as internal or external. *Internal challenges* across cases include (case no.): difficulties in training and managing offshore teams (Firms 3, 4, 5); anxiety among domestic staff and internal resistance (Firms 5, 6, 8, 12); decreased productivity (Firm 6); loss of managerial control (Firms 3, 11); insufficient service quality (Firm 10); miscommunication with offshore teams (Firms 7, 8, 13); and challenges with specifying tasks (Firm 13). Importantly, across case firms, most internal challenges were rarely anticipated. Often times, they occurred in the process of setting up operations, including the recruitment and training of offshore staff and the transfer of knowledge to offshore operations. One example is lack of understanding of tasks at the offshore unit due to lack of (face-to-face) communication. A manager from Firm 2 explains:

> "The major problem is project management […] and clear understanding of what the product goals are. […] We learned that we need to train people in person, have them understand our company and the products clearly, and have presence on the ground wherever we are." (Manager Firm 2)

Another frequent example of an often underestimated internal challenge is political backlash and distrust in management along with fear of job loss, leading to resistance to cooperate in training and task delivery to offshore staff. A manager at Firm 8 remembers:

> "A lot of people were thinking 'Am I training this guy to work in the new office, or am I actually training my replacement?'. […] One of our senior and most experienced U.S. employees was very concerned with the company expanding their resources to Bangalore. He was concerned [that] with this expansion he would lose his job." (Manager Firm 8)

External challenges mostly relate to perceived features of the particular location from which tasks are sourced, and/or differences or distances between this location and firm headquarters. Examples include: cultural differences (Firms 1, 4, 6); infrastructure challenges (Firms 1, 4); power outages (Firm 9); Internet blockage (Firms 4, 9); political instability (Firms 1, 9); time zone differences (Firms 2, 7, 10); and wage inflation (Firms 3, 6). Interviews suggest that most of these challenges were unexpected. Some occurred and impacted operations from the very beginning, such as challenges with infrastructure. This is an example from Firm 4 in Cairo:

> "Cairo is a slow city. We lost lots of people in Cairo, people almost quit on us because of the expectation... […] To get through Cairo, it is ridiculous; it would take forever." (Manager Firm 4)

Some external challenges increased over time, such as wage inflation. Others, by comparison, would occur occasionally or seasonally, such as power outages caused by monsoon, political uprisings, or currency fluctuations. The interviewed manager at Firm 1 gives the example of monsoons in India which would lead to loss of internet connections and resulting service disruptions:

> "India is still a place where when they get monsoons, it can be such that people can't get to work or I was there when they lost internet connections. […] A direct internet connection to the U.S. that had to be rerouted another way around the world which created band width issues. […] " (Manager Firm 1)

Notably, some external and internal challenges are highly interrelated. Examples include intellectual property protection (external) and data security (internal); availability of talent (external) and recruiting talent (internal); cultural differences (external) and miscommunications (internal). A special case in this regard is employee turnover. Here, firms *differ* in the way they refer to the cause of this challenge.

Whereas some firms (e.g. Firm 4) perceive turnover mostly as an internal challenge resulting from the level of pay, nature of work, and career opportunities, other firms (e.g. Firm 8) frame turnover as an external challenge due to e.g. competitive location conditions rather than as a result of internal policies (see also below). Interestingly, these differences in framing also reflect differences in responses to this challenge as we see further below.

Mitigating

Almost all case firms report that they have mitigated at least some of the major challenges they experienced. Mitigation not necessarily means that a particular challenge was eradicated, but that a firm has invested into a managerial practice or process which has helped lower the likelihood that a particular challenge occurs, or which lowers the impact a challenge has on operations. Direct mitigation is particularly relevant for 'internal challenges'. Examples of mitigated challenges include: (lack of) staff qualification, lack of communication with offshore operations, anxiety of home-based staff, and employee turnover (see also example quotes, Table 3). The latter – lowering impact rather than addressing the challenge directly – is more relevant for external challenges which often cannot be directly affected, but whose *impact* can be managed. Examples include: cultural differences, time zone differences, language barriers and intellectual property concerns. However, most challenges that were reported to be mitigated are internal rather than external. Yet, independent of their perceived cause, data shows that case firms still differ significantly in terms of whether they initially tried to mitigate particular challenges or not. Whereas some challenges, such as communication barriers between onshore and offshore units, were typically dealt with in similar ways, e.g. by increasing frequency and intensity of face-to-face communication (see Table 2, and quote Firm 8 in Table 3), other challenges were dealt with quite differently. I will discuss major reasons next.

First, firms that have taken active measures to mitigate challenges tend to be large (e.g. Firms 4 and 8) rather than small (e.g. Firms 2 and 11). This difference can be explained by the greater ability of large firms to allocate financial and human resources to experiment with problem solutions. Firm 4, for example, significantly invested into skills and cultural trainings, career development, and hiring procedures to tackle cultural differences, external client satisfaction, language barriers and employee turnover. One manager of Firm 4 illustrates:

> "If I have to run a business in Cairo, they pressed upon me to take a class about their cultural differences and culture norms so I can be a better manager in working with that organization. […] On top of that, [we] track surveys per individual staff to measure customer satisfaction level. If survey results are not satisfactory, there will be a one-on-one training session for staff." (Manager of Firm 4)

Also, large rather than small firms seem to invest into practices dealing with some *external* challenges. For example, Firm 9 engaged in extensive negotiations with the local government in Santa Domingo (DR) to reduce capital costs of local operations. Local political leverage of large firms may facilitate this process. Another example is Firm 8 which dedicated extra funds to satisfy bribing expectations of government officials in India when shipping IT equipment.

Second, firms that have tried to mitigate challenges are typically those whose offshoring projects have been driven by multiple strategic goals, such as customer satisfaction, access to talent, and increasing service quality, rather than just cost savings. By contrast, firms with a strong cost imperative seem more likely to tolerate challenges or relocate in response to them. Firm 4 is a good example for the first type. In order to tackle the challenge of employee turnover, Firm 4 not only engaged in practices of overstaffing (to buffer the temporary loss of staff, see quote in Table 3), but also invested into work conditions and career development:

> "A lot of things are done specifically to retain employees. We try to challenge employees with new work and task. We also […] create individualized personnel plans. These […] include goals and benchmarks to move up within the company. [They] help provide the employees a plan for professional development and growth. Flexible shifts might be an option and this includes working from home." (Manager Firm 4)

In many cases these problem-driven mitigation practices have created a foundation for expansion of offshore operations, favoring, again, particularly large firms who benefit from scope and scale economies when increasing their global presence. In so far, mitigation practices are directly linked to the development of global organizational capabilities.

>>>>>> INSERT TABLE 3 <<<<<<<

Tolerating

Findings suggest, however, that mitigation is not the only response to challenges. Whereas around 50% of all reported challenges were partially mitigated by case firms over time (see Table 2), the other 50% were either tolerated, or they led to relocation decisions. It is therefore important to understand what is driving these different types of responses.

Tolerating means that challenges are accepted as given either because firms are unable or unwilling to do anything about them. This applies in particular to various *external* challenges, such as political instability, changing visa policies, infrastructure challenges, and power outages. For example, Firm 1 reports how changing visa policies in the U.S. and India have challenged the implementation of offshoring decisions. Although the interviewed manager notes that lobbying activities – at least symbolically – address such challenges, he concedes that there is "nothing significant we can do beyond that kind of work". With respect to seasonal challenges of power outage due to monsoons (in India), the same firm similarly seems to have been unable to respond appropriately. In this particular case, however, another reason for tolerating such challenges – other than lack of influence – becomes apparent: the firm's cost imperative and related unwillingness to *invest* into solutions, which might mitigate the operational impact of such challenges. One manager explains:

> "It would be *too expensive* to have some form of fail over […]. We don't have a way to switch over 600 workers to 600 workers in the U.S. because they do a different type of work than our people here do. […] [This] is just the risk that you have to take." (Manager Firm 1)

A similar logic applies to firms tolerating *internal* challenges, such as low labor productivity and internal resistance (see Table 2). Data suggests that these challenges are tolerated particularly by firms whose offshoring activities are mainly driven by a cost-saving rationale. One example is loss of productivity which Firm 6 'discounts' in exchange for labor cost advantages (see quote in Table 3). Another example is employee turnover. Whereas Firm 4, whose activities have been guided by a range of strategic objectives, took multiple measures to promote employee retention (see above), Firm 8 would perceive employee turnover as a tolerable challenge, mainly due to 'external causes', as long as overall cost savings seem greater than costs of rehiring and retraining. The following quote illustrates this:

> "Well, there [is] still a lot of turnover. […].The […] HR department hired one guy. He worked for two weeks and then left the company for IBM. We then hired a second guy for the position, this person never even showed up. […] So then we hired a third person he came in for a week of work and then left and never showed up again. […] We do not measure that. However, […] *we know that the cost of one U.S employee is equal to that of three Indian employees…*." (Manager Firm 8)

Another example is the way firms deal with political backlash and internal resistance to offshoring due to fear of job loss. Some companies, such as Firm 8, at least attempted to mitigate this challenge by communicating offshoring goals and related growth opportunities to its domestic employees. Firms 6 and 12 went further by reallocating tasks at home. In the case of Firm 12, however, this measure was applied merely to very qualified and experienced employees. By contrast, similar to Firm 5 (see quote in Table 3), Firm 12 tolerated job losses and resulting anxieties at home, in the face of cost savings abroad and potential longer-term competitive advantages. One manager explains:

> "When we outsourced our development effort it reduced some of the engineering staff in the US but the *saving grace* there is that it made us more operationally efficient and therefore [our company] was able to perform at a higher level […] and by the company growing, the best way to ensure our jobs." (Manager Firm 12)

Such responses particularly applied to large firms (with cost-saving imperatives). By contrast, one typical challenge small firms would tolerate rather than mitigate is loss of managerial control (Firms 3, 7, 11). Unlike in larger firms, the capacity of small firms to implement monitoring practices is limited due to lack

of financial and managerial resources. For these firms, giving up managerial control is seen as a necessary trade-off. A manager of Firm 3 puts it this way:

> "Yes, risks do exist, especially with the lack of control over your workforce, but that is something most companies are willing to risk, otherwise they would not offshore in the first place." (Manager Firm 3)

In another example, the manager of a small firm (Firm 11) describes how the assurance of quality standards would have required tighter monitoring of offshore operations, e.g. through regular check-ups. However, the mere fact that this manager was already working long hours just to get his regular work done (as he does not have assistants at his disposal) made it impossible for him to tackle the perceived loss of managerial control over offshore operations.

In sum, findings reveal that firms sometimes tolerate rather than try to mitigate challenges for various reasons. First, many firms tolerate certain external challenges, such as lack of infrastructure and power outages, as they feel unable to directly impact these challenges. Second, firms with a strong cost-saving imperative tend to avoid investments needed to mitigate challenges, such as employee turnover, loss of operational efficiency and internal resistance, as long as (perceived) labor cost advantages seem to outweigh unintended operational (and political) costs. Third, small firms face particular resource constraints which lead them to tolerate certain internal challenges, such as loss of managerial control.

Relocating

Beside mitigating and tolerating, findings suggest that firms sometimes respond in a third way – by relocating. Relocation means that offshore operations are shifted – either temporarily or permanently – to another location, with the attempt to escape particular challenges. In 11 out of 12 cases, these challenges are external rather than internal. They include: (perceived) lack of available skills, time zone differences, wage inflation, political instability, and language barriers. In most cases, operations were shifted from hotspots (like India) to second-tier, less crowded locations (e.g. Latin America).

Thereby, two types of relocation can be distinguished: The first type involves the *permanent* shut-down of established units (or contracts with local suppliers), and the set-up of new units and/or supplier relations in a different location. The second type involves a *temporary* shift of operations from one location to another, and typically does not imply the complete shut-down of established operations. The second type is typically coupled with internal mitigation allowing for global operational flexibility, whereas the first type does not involve mitigation solutions.

Permanent relocations can be observed particularly for small and/or cost-focused firms that are challenged by a number of perceived location disadvantages which they are unable or unwilling to mitigate or tolerate. One example is Firm 2 that shifted software development operations from India to the Ukraine in response to perceived lack of skills of Indian software engineers (see Tables 2, 3), difficulties of operating across large time zone differences, and lack of qualified suppliers. Similarly, Firm 6 decided to relocate product development operations from China to Costa Rica, in response to growing wage inflation, again time zone differences, and language barriers (see Table 2). Often times, these challenges were tolerated (rather than mitigated) by the firm before a threshold was reached where relocation appeared to become a more feasible (and justifiable) option. For example, in the case of Firm 6, employee turnover in China was long accepted as an external constraint. However, the tolerance for related wage inflation changed over time, as the manager of Firm 6 explains:

> "… inflation is high, so every year cost-savings go down, and that's why we are exploring near shore opportunities now." (Manager Firm 6)

By contrast, *temporary* relocation decisions due to location-specific operational challenges, such as power outages, strikes, political uprisings etc. (see quotes in Table 3), were taken in particular by large firms with objectives beyond cost, such as Firms 4 and 9, who have learned over time to utilize globally dispersed operations to absorb local transaction volumes as a form of disaster recovery. In the case of Firm 9, for example, tech support operations were re-routed from Cairo to another unit in the Dominican Republic. In case of Firm 4, tech support was shifted from Egypt to Canada, during the political uprising in Egypt. In

both cases, these experiences triggered investments into internal operational flexibility across units. Strategic orientation towards service quality and client satisfaction were important drivers in this process:

> "If there's instability there, you almost have to build the centers that can allow you to turn off and turn on based on what's happening. [..] I think that if you are not redundant and not putting the cost into business then you might not have that advantage from a customer point of view. Being able to serve customers is the number one priority." (Manager Firm 4)

By contrast, other firms, such as Firm 1, do not seem to have this capacity (see above), mainly because their processes and skill sets are not harmonized and/or they are not willing to invest into respective disaster recovery measures (see above). Instead, following their cost-saving strategy, they have chosen to tolerate service disruptions or delays in their current locations.

In sum, relocation as a response to operational challenges happens in various ways. On the one hand, in particular small firms seem likely to respond to external challenges, such as wage inflation and time zone differences, by moving operations to more favorable locations. Their lack of capacity to deal with external challenges internally – along with cost-saving imperatives – seems to be a major driver. On the other hand, certain large firms with multiple strategic objectives seem likely to respond to external challenges, such as power outages, by shifting operations temporarily to other, already established locations. That is, while challenges are not mitigated locally, global mitigation capacity is developed that allows to curb local constraints through temporary relocation. This response strategy can be categorized as a mixed form of mitigation and relocation. Next, empirical findings are summarized and testable propositions as well as broader implications are derived for future research.

Discussion

The main objective of this article has been to explore, based on data from a multi-case study, initial firm responses to offshoring implementation challenges in situations where firms lack prior related experience with these challenges. Findings show that while learning to mitigate a challenge is *one* response, firms sometimes choose to tolerate a challenge, or relocate operations in response to it. Differences in

responses are related to perceived firm control over the cause of a challenge, strategic orientation, and resource endowments. Results help counterbalance an overemphasis on experience-based learning in prior studies on capability development in general and offshore capabilities in particular, by framing mitigation attempts as *one* strategic option under certain facilitating conditions. Next, particular propositions are developed that may guide future research. The propositions are summarized in a model displayed on Figure 1.

>>>>>>>>>>>>>>>>>> INSERT FIGURE 1 <<<<<<<<<<<<<<

First of all, a distinction is made between internal and external challenges based on the degree to which a firm perceives to have control over the cause of a challenge. Examples of typical internal challenges include: miscommunications, lack of trust, low service quality, inefficiencies in training and operations (see similar, Dibbern et al., 2008; Vlaar et al., 2008; Levina & Vaast, 2008). External challenges include: infrastructure-related challenges, political instability, wage inflation, and intellectual property protection (see similar Hahn et al., 2009; Jensen & Pedersen, 2011; Demirbag & Glaister, 2010). Some challenges, such as employee turnover, are either viewed as primarily 'internal' or 'external' depending on the weight given by the firm to internal vs. external causal factors. Findings suggest that internal challenges are typically mitigated or tolerated by firms, whereas external challenges are typically either tolerated or lead to decisions to relocate operations (see Figure 1).

A number of explanations can be given for that observation. The fact that an internal challenge is often caused by firm-internal structures and practices implies that a modification of these structures and practices may directly change the likelihood of a challenge to occur. For example, the often mentioned challenge of 'distrust and misunderstandings' between offshore and onsite teams (see also Levina & Vaast, 2008) is often addressed by enhancing (face-to-face) communication which directly tackles one of the causes of the problem (see also Leonardi & Bailey, 2008; Hanna & Daim, 2009). In other words, thanks to control advantages, searching for solutions for internal challenges is 'easier' than for external

challenges. In fact, findings show that external challenges are rarely addressed directly, partly because most firms (except large firms) lack the power among local players to directly modify local environments (see also Manning et al., 2012). Consequently, internal challenges are more frequently mitigated than (the impact of) external challenges. Also, the greater likelihood of addressing internal challenges may relate to stakeholder expectations, e.g. clients and employees, that challenges in control of the firm should be addressed if possible. However, findings also indicate that *tolerating* (rather than mitigating) an internal challenge remains an important strategic option.

By contrast, relocation appears to be an option that is almost exclusively taken in the case of external challenges. Oliver (1991) uses the term 'avoidance' for similar strategies in response to institutional constraints where firms for example exit certain businesses whose operation is highly uncertain, or subject to unfavorable external conditions (Pfeffer & Salancik, 1978). In international business, Witt and Lewin (2007) similarly discuss 'escape' from unfavorable local institutional conditions as an important rationale for foreign investment. However, even in the case of external challenges, findings indicate that tolerating – up to a certain extent – remains an important option. This may be motivated by the expectation of (or hope for) improvement (Hirschman, 1970), or a function of satisficing (Simon, 1956). The latter denotes the idea – in this case – that problems are addressed only if their operational impact exceeds a certain threshold of acceptability (see also Winter, 2000). For example, Firm 6 in this study tolerated challenges related to language, time zone and wage inflation in China before wage inflation increased to an extent that it was not any more seen as tolerable – and relocation to Costa Rica became more feasible. In sum, the following propositions can be made:

> **P1: The more an offshoring challenge is perceived to be caused by factors within the control of a firm (=internal challenge), the more likely will the firm either tolerate or try to directly mitigate that challenge rather than relocate in response to it.**
>
> **P2: The more an offshoring challenge is perceived to be caused by factors outside the control of a firm (=external challenge), the more likely will the firm either tolerate that challenge or relocate in response to it, rather than trying to directly mitigate that challenge.**

The *second* major dimension discussed in this study is the strategic orientation of firms. In line with Ocasio (1997), findings indicate that strategic goals affect managerial attention to the necessity (and importance) of responding to offshoring challenges. In particular a strong cost orientation (and the absence of other objectives, e.g. client and employee satisfaction) may lead to tolerance rather than mitigation of internal challenges, such as low productivity and political backlash. This is partly because mitigation requires investments which firms are less likely to make if they are strongly focused on saving costs. Here the principle of satisficing seems to apply again (Simon, 1956; Winter, 2000): As long as firms see their main objective – saving (labor) costs – met, even if cost advantages decrease over time, they are likely to refrain from actions in response to upcoming challenges, e.g. low productivity in case of Firm 6, or internal resistance in case of Firm 7.

By contrast, firms whose operations are driven by multiple strategic objectives, including service quality and client satisfaction, are less likely to tolerate implementation challenges. One example is Firm 4 which created a global infrastructure to absorb unforeseen local challenges, such as power outage. This finding gives the recent debate on 'hidden costs' (e.g. Stratman, 2008; Stringfellow, 2008; Larsen et al., 2013) an interesting twist: Findings suggest that firms that are mainly interested in saving labor costs are *more* likely to tolerate 'hidden costs', e.g. loss in productivity or extra training costs because of rehiring, than firms that are driven by a range of strategic objectives that help them pay attention to various consequences of operational challenges. However, firms with a low-cost imperative are also more likely to (permanently) relocate operations if external conditions become too costly (e.g. Firm 6) making investment into mitigation capabilities even less attractive. In sum, it can be proposed:

> **P3a: The more a firm considers a range of strategic objectives rather than just cost savings, the more likely will it mitigate rather than tolerate an *internal* offshoring challenge.**
>
> **P3b: The more a firm considers a range of strategic objectives rather than just cost savings, the more likely will it mitigate rather than tolerate or (permanently) relocate in response to an *external* offshoring challenge.**

A *third* major factor are resource endowments. Some scholars have noted that capability development requires resources and thus needs to be seen as an investment (Kogut & Kulatilaka 2001). Examples of investments include resources needed for staff training, frequent flights between operations, quality control and supervision etc. In case of outsourcing, firms need to decide how much to invest in software, vendor training, and supervision (Stratman, 2008; Luo et al., 2013). In line with these insights, this study makes the important observation that the mere *availability* of resources at the time when challenges occur may affect the attractiveness (and feasibility) of different response options.

As for internal challenges, findings show that firms with abundant financial and human resources (typically large firms) are more likely to invest into mitigation capabilities, whereas firms lacking these resources (small firms) typically tolerate such challenges. For example, managers at small firms, as indicated by case findings, often do not have the capacity to implement more elaborate monitoring and control procedures to tackle potential problems of offshore service quality. Instead operations are either back-sourced, or challenges are tolerated as long as core objectives are sufficiently met. By contrast, large firms can leverage more abundant managerial resources to mitigate such challenges. As for external challenges, e.g. wage inflation, large firms are more likely to directly mitigate challenges, e.g. by making agreements with competitors to prevent wage inflation (see Manning et al., 2012). Large firms leverage local branding power and employment offerings for local talent which facilitate effective political management. By comparison, small firms are more likely to relocate. This can be explained by small firms' limitations in benefitting from scale and scope economies that might compensate e.g. for wage inflation. Also, their ability to compete for talent vis-à-vis larger firms are more limited, e.g. due to lower brand recognition. In sum, it can be proposed:

> **P4a: The larger the firm (in terms of resource endowments) the more likely will it mitigate rather than tolerate an *internal* offshoring challenge.**
>
> **P4b: The larger the firm (in terms of resource endowments) the more likely will it mitigate rather than tolerate or (permanently) relocate in response to an *external* offshoring challenge.**

Finally, findings point to an interesting special case of mitigation response that involves temporary – rather than permanent – relocation. In case of Firms 4 and 9, service disruptions in particular locations, e.g. Internet blockage in Egypt during the time of political unrest, led to the decision to temporarily shift operations to other locations and the subsequent development of global capabilities supporting this emergency practice. Unlike *permanent* relocation in response to external challenges, which is a response mainly taken by firms who either lack the resources to respond to external challenges or whose cost focus drives relocation decisions, *temporary* relocation does require globally available structures and resources to absorb local operations, and it seems more likely to happen if service quality and client satisfaction are important strategic concerns besides costs. For example, Firm 4 regards 'crowdsourcing' and excess staffing at multiple locations as a critical capability to develop in order to buffer local operational constraints (and to meet client expectations). Firm 1 by contrast prefers to tolerate local operational challenges, such as power outages, since setting up redundant operational structures would be too costly. In sum, it can be proposed:

> **P5: The larger the firm (in terms of resource endowments) and the more a firm considers a range of strategic objectives rather than just cost savings the more likely will it invest into solutions that enable *temporary* relocation of operations (to other units with equivalent offshore capabilities) as an alternative to tolerating or *permanently* relocating in response to an *external* offshoring challenge.**

These findings have important implications for research on offshoring implementation (Lahiri et al., 2012; Jensen, 2012; Manning et al., 2013). *First*, they suggest that firms *differ* in terms of how they respond to novel offshoring challenges, which implies that firms also differ in the extent to which they develop capabilities supporting offshore operations. In other words, the value of offshoring 'experience' is rather contingent: Whereas some firms may benefit from experience-based learning and capabilities (Nickerson & Zenger, 2004; Jensen, 2009, 2012), others may have similar experiences, but do not advance capabilities since their cost focus and/or resource limitations prevent them from doing so. *Second*, findings suggest that offshoring firms do not just mitigate *internal* challenges, e.g. lack of trust, communication flaws etc.

(e.g. Leonardi & Bailey, 2008), while avoiding external risks (e.g. Hahn et al., 2009), but in particular large firms often take active measures to mitigate or lower the impact of *external* challenges, e.g. power outages and limited availability of talent (see also Manning et al., 2012). However, mitigation attempts are most likely if firms are guided by multiple strategic objectives. *Third*, findings indicate that offshoring has not gone 'beyond' the logic of labor arbitrage (see e.g. Lewin et al., 2009; Farrell, 2005), but that cost considerations remain an integral part of offshoring (Levy, 2005). This may also explain why many firms continue to struggle with, yet also tolerate, certain challenges, e.g. internal resistance at home and employee turnover offshore. *Fourth*, findings partly explain why firms seem less concerned with location risks when taking functions abroad (see e.g. Hahn et al., 2009). Increasing opportunities to relocate *again* facing local constraints, thanks to process commoditization and growing global capabilities, seem to help mitigate risks of any particular location.

Findings also have important implications for research on capability development and learning. They confirm the importance of problem-driven capability development (see e.g. Lampel et al., 2009; Nickerson & Zenger, 2004), but they point to important nuances. *First*, they suggest that it is useful to distinguish capabilities addressing internal vs. external challenges, because options to respond to such challenges are different, which may affect patterns of learning. *Second*, findings emphasize the often neglected need for internal resources to invest into capabilities (see also Barney, 1991; Kogut & Kulatilaka, 2001). In particular, with regard to developing capabilities addressing external challenges, firm resource endowments, including financial resources and branding power, seem to matter a lot. Thus, the development of what Oliver and Holzinger (2008) call 'political management capabilities' are much more relevant for large firms than for small firms. *Third*, findings suggest that strategic orientations of firms can play a critical role in affecting the development of capabilities. Different strategic orientations change aspiration levels and affect the awareness for consequences of (tolerating or ignoring) operational challenges (Winter, 2000; Weick & Sutcliffe, 2006; Simon, 1956). *Fourth*, findings suggest that relocation

is becoming an important response to external operational challenges. Whereas political management, including lobbying, used to be an important capability firms develop over time (e.g. Oliver & Holzinger, 2008), firms increasingly take the exit option (Hirschman, 1970; Witt & Lewin, 2007) thereby 'avoiding' institutional and other location constraints altogether (Oliver, 1991). Facilitating factors include the increasing commoditization and global availability of services and skills (Dossani and Kenney, 2007), but also the increasing ability of firms to develop globally flexible infrastructures that can absorb processes from any particular location (see above). Future research on capability development therefore needs to take relocation options more seriously – both as a 'substitute' for location-specific capabilities, and as a potential 'result' of global capabilities.

This study also has some important limitations which need to be addressed in future research. *First*, because of lack of longitudinal data, responses could not be tracked over time. It could be predicted, for example, that in particular *permanent* relocation decisions typically follow a certain period of tolerating, or even a sequence of tolerating and mitigating attempts. Future research needs to investigate such sequences and related facilitating and constraining factors. For example, how do strategic orientation and resource endowments affect the *time* it takes firms to initiate mitigation attempts or to develop mitigation capabilities? *Second*, for this study I lacked data on actual firm decision-making processes or the process of developing particular offshore operations. Instead, data for this study focuses on retrospective managerial perception of firm challenges and responses and therefore provides more qualitative insights than typical survey-based designs, yet it lacks in-depth process data. Future studies could investigate for example how strategic orientation and resource endowments interplay in actual decision-making processes. This may also include an elaborate analysis of risk assessments facing options to mitigate, tolerate or relocate in response to challenges. *Third*, and related to this, additional variables need to be explored in future studies, such as the degree to which firms are willing to take risks; the degree to which they commit location-specific resources; but also the degree to which particular business

systems facilitate certain solutions rather than others. For example, labor law may facilitate or constrain measures aimed at controlling employee turnover. Similarly, intellectual property protection regimes (or the lack there-of) may not only affect the likelihood of certain challenges, e.g. data security, to occur in the first place, but also influence the effectiveness of potential solutions to challenges, e.g. contractual non-disclosure agreements to curb the negative effects of employee turnover. *Fourth*, firm size as a proxy for resource endowments needs to be complemented in future studies with more detailed data on e.g. percentage of revenue reinvested in process innovation (to capture the likelihood of internal capability development) or number of offshore staff (to capture the likelihood that solutions are developed locally).

Managerial Implications

Findings of this study also have important managerial implications. *First*, findings suggest that a strong focus on costs may increase the tendency that firms tolerate challenges rather than trying to remedy them. This, however, may eventually *increase* operational costs, even if these costs (e.g. delays as part of operational inefficiencies, or retraining as part of employee turnover) are 'hidden'. By contrast, adopting a broader strategic paradigm beyond cost savings may eventually *save* costs in the longer term. For example, global employee and external client satisfaction can prompt firms to respond more immediately to internal resistance and fear of job loss and prevent political backlash as well as costly delays. *Second*, findings point to an increasingly important managerial option in response to certain location-specific challenges, such as power outages. Whereas in the past, many firms would either tolerate such challenges or engage in costly and tedious political activities to improve external conditions, e.g. better power infrastructure, more firms have started mitigating *local* challenges by developing *global* firm infrastructures, e.g. clowd technology and/or substitutable resources at different locations, which allows for temporary contingency management. Such a shift of focus from local to global responses may be needed in the future to operate globally dispersed operations sustainably. *Third*, findings indicate that

whether or not firms try to tackle certain challenges may depend on their perception of what *causes* these challenges to happen. The more a firm is able to identify *internal* causes of a challenge, the more likely will it address them. This dynamic is particularly evident with employee turnover. More concretely, if firms keep pursuing turnover as an *externally* caused challenge (e.g. due to competition for talent, or lack of loyalty as a 'cultural problem') it is very likely that this challenge will continue to exist. However, recognition of *internal* causes, e.g. lack of interesting and responsible work, and insufficient salary, may prompt more firms to work on sustainable solutions, which, in the longer term, may give them a competitive advantage.

Conclusion

This study has developed a more nuanced perspective on firm responses to offshoring implementation challenges. Future studies need to build on these insights and further elaborate our understanding of how firms take various response options over time, what role strategy plays in this process, and how firms handle resource constraints in considering solutions to operational problems.

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Tables and Figures

Table 1: Overview of Case Studies and Interviews

Case Firm	Type of Firm	Services Sourced From Abroad	Sourcing Locations / Mode	Interviews
Firm 1	Large U.S. Consulting / Business Services Firm	Finance and Accounting, software development, software testing	Various; mainly to India (also focus here); mainly captive	2 (Senior managers)
Firm 2	Small U.S. Software company	HR, engineering, software development, data entry	Ukraine, Pakistan, India; mostly outsourced	2 (Vice president, manager)
Firm 3	Small U.S. Software firm for healthcare clients	Software development	India (Chennai), outsourcing	5 (various managers / employees)
Firm 4	Large U.S. software and data storage service firm	Technical support; R&D	India, Egypt, Canada, China, Russia, Ireland; mostly captive	7 (VP tech support, senior director)
Firm 5	Large U.S. insurance provider	Various, including data entry	Manila, Philippines; captive	2 (Senior managers)
Firm 6	Midsize U.S. software firm specializing in financial services	Product development, quality assurance	Beijing, Costa Rica, outsourcing	2 (R&D manager; CEO)
Firm 7	Small U.S. Advertising / Merchandising Firm	Artwork/design	India, China, Vietnam; outsourcing	3 (Owner / Founder)
Firm 8	Large U.S. Financial and Legal Intelligence Provider	Customer Support, back-end IT infrastructure	Bangalore	3 (Client Manager, Senior Analyst)
Firm 9	Large U.S. Business Service Provider	Call Centers, tech support, quality assurance	Various in Latin America (Dominican Republic), Africa (Tunis, Cairo), Asia, Europe	2 (Senior managers)
Firm 10	Midsize U.S. Mathematics Software Developer	Code development	Bangalore, outsourced	3 (Managers, Engineer)
Firm 11	Small U.S. web design firm	Code development	Former: Gujarat, India (outsourced); Rostov (Russia); Current: Kherson (Ukraine)	2 (CEO) plus email follow-up
Firm 12	Small U.S. Software firm	Software development services	Canada and India, outsourcing	1 (VP Marketing)
Firm 13	Small U.S. Consulting Firm	Various, e.g. website development, book editing, poster design	Romania, Poland, Philippines, Dubai (all outsourced)	3 (Owner)
Total: 13	**6 small, 2 midsize, 5 large**			**37 Interviews**

Table 2: Cross-Case Comparison of Responses to Challenges (external - italic; internal - regular)

ID, Size Location	**Mitigated Challenges (Challenge:** Means of Mitigation**)**	**Tolerated Challenges (Challenge:** Reason for Tolerating**)**	**Relocation Due to Challenges (Challenge:** New Location**)**
1 L (India)	(a) ***Cultural differences***, e.g. career paths / promotions: Adoption of U.S. system (b) ***Currency fluctuation***: Hedging in futures market	(c) ***Political instability*** : Savings outweigh risk, relocation too costly (d) ***Changing visa policies*** between U.S. and India : Cost benefits (e) ***Infrastructure challenges,*** e.g. monsoon: (see c)	
2 S (India, Ukraine)	(a) ***Finding/Recruiting Talent*** (in Ukraine) : outsource task to talent agency		(b) ***People skills/mentality*** in Pakistan and India (too much guidance): Relocate to Ukraine (c) ***Time zone difference*** to India: Relocate to Ukraine (d) ***Lack of qualified suppliers***: Relocate to Ukraine
3 S (India)	(a) **Management of offshore teams**: consult with local provider to employ better management	(b) **Loss of managerial control**: Accepted risk vs. cost saving benefits of offshoring	(c) ***Wage inflation*** (in India): → consider relocating but not done yet
4 L (Cairo, Canada, others)	(a) ***Cultural differences*** within organization: culture awareness training (b) **Satisfaction of external clients** with service: monitoring, survey, staff training, redundant operations (c) **Employee turnover**: higher pay, overstaffing, flexible hours, challenging tasks; hire second-tier talent (d) **Hiring practice**: adjust job description to attract more people (e) ***Language barriers***: train/hire multi-lingual tech support staff (f) **Training costs**: reduce travelling for coaches, train senior local employees	(g) ***Slow traffic / Infrastructure*** in Cairo occurance too unpredictable to mitigate (h) ***Poaching practices***: treated as given in a hotspot (no direct mitigation)	(i) Service disruption due to ***political uprising*** in Cairo: shifting of tasks to Canada (temporarily)

ID, Size Location	Mitigated Challenges (**Challenge:** Means of Mitigation**)**	Tolerated Challenges (**Challenge:** Reason for Tolerating**)**	Relocation Due to Challenges (**Challenge:** New Location**)**
5 L (Manila)	(a) **Lack of staff training**: send coaches overseas; monitoring (b) **Employee turnover** due to overnight shifts, routine tasks: more complex tasks (c) ***Low language skills*****:** Language tests during recruitment	(d) **Internal resistance** in home team / loss of trust in management: cost benefits greater than costs of backlash (e) **Lack of entry-level positions** at home: growth opportunities offshore	
6 M (China, Costa Rica)	(a) ***Cultural differences*** (China): Emphasis on these issues in staff training; staff rotation (b) **Anxiety among home-based staff**: reallocation of tasks adding new positions; better communication of offshoring goals (c) ***Intellectual property concerns*** (China): offshore tasks limited to bug-fixing, lower-level work	**(d) Lower productivity:** labor cost advantages perceived to outweigh productivity loss (e) ***Employee turnover*** in China / lack of trust with domestic teams: (at first) tolerated due to cost advantages	(f) ***Wage inflation*** in China: Relocate to Cost Rica (g) ***Time zone difference*** to China: Relocate to Costa Rica (h) ***Language barriers*** (China): Relocate to Costa Rica
7 S (India and others)	(a) **Communication barriers**: learning to communicate better over time(e.g. use phone rather than email)	*(b)* ***Time / geographic distance:*** No means to mitigate that *(c)* **Loss of managerial control*:*** Accepted risk of small firm	
8 L (India)	(a) **Miscommunication during staff training:** More resources devoted to training staff, conference calls from U.S. (b) **Miscommunication during operation:** More face time (c) **Anxiety among home-based staff**: Better communication of offshoring goals and scope (d) ***Bribing*****:** Dedication of extra funds to satisfy government officials (e.g. for shipping equipment)	**(e)** ***Employee turnover*** in Bangalore: Despite competition for talent, cost advantages still greater than option to operate from home	

ID, Size Location	Mitigated Challenges (**Challenge:** Means of Mitigation)	Tolerated Challenges (**Challenge:** Reason for Tolerating)	Relocation Due to Challenges (**Challenge:** New Location)
9 L (Cairo, Tunis, Dom. Rep)	(a) ***Changing government/policies to foreign investors (DR*)**: Renegotiation with government (tax, rent, …)	**(b)** ***Power outages* in Santa Domingo:** Reason for tolerating not directly mentioned (assumed: outages too infrequent)	(c) ***Service disruption*** (blocked internet access) due to ***uprising*** in Cairo and Tunis: Relocation to privately held center in DR (d) ***Changing condition for rent gov. owned facility*:** reroute operations to privately held center in DR
10 M (India)	**(a)** ***Communication delays due to time zone difference*:** Increase frequency of communication **(b) Challenges with data synchronization with HQ:** better timing of data updating **(c) Service quality:** tighter tracking of progress		
11 S (India, Russia, Ukraine)		**(a) Loss of managerial control:** Accepted risk associated with offshoring	**(b)** ***Experience of lack of skills in India*:** Relocate to Russia **(c) Lack of capital** (for Russia)**:** Relocate to Ukraine
12 S (India, Canada)	**(a) Job insecurity of highly qualified people at home:** Reallocation to other tasks	**(b) Anxiety at home due to job losses of lower-skilled employees:** Accepted trade-off for offshore cost advantage	
13 S (Poland, Philip., Roman.)	**(a) Ambiguous tasks:** Intensify communication effort **(b) Challenges with service quality:** Fine-slice tasks, tighter quality control		
Total	**28 Discrete Reported Challenges (11 *External*, 17 Internal)**	**16 Discrete Reported Challenges (9 *External*, 7 Internal)**	**12 Discrete Reported Challenges (11 *External*, 1 Internal)**

Table 3: Example Quotes for Challenge-Response Pairs Across Case Firms

(C)hallenge-(R)esponse Pairs	Example Quotes
Mitigating Responses	
C: Low language skills R: Recruitment tests	"We require English proficiency testing as part of the interviewing process for jobs in which it is applicable as well as cultural training for those that interact with customers directly whether via e-mail or phone." (Manager Firm 5)
C: Lack of communication R: Coaching, face-to-face time	"Well, one way we tried to improve our communication issue was by having more face time between U.S. employees and the Indian employees. For example we flew one of our specialists by the name of Jenny who works in the U.S office. She was asked to go to Bangalore to assist in training and building a stronger relationship as well as building a strong team environment." (Manager Firm 8)
C: Employee turnover R: Overstaffing	"So if you need 100 people, you better have 110 because at some point they're going to walk out on you… if I already have people into training and I'm over that, as people leave, people are coming out of training. So you are constantly staying ahead of that, so you always have a 10 - 15 buffer in that training mode instead of when somebody leaves and you have a 6 months ramp-up, you end up with 2 or 3 months ramp-up" (Manager Firm 4)
C: Lack of IP protection R: Fine-slicing of tasks	"So if we did find out they were stealing our secrets. […] We are now purposeful of what we give them, we purposely only give them pieces of the application, more bug-fixing, standard enhancements, lower level work." (Manager Firm 6)
C: Ambiguity of tasks R: Improved communication	"You have to be very clear with your communications. Not only with just making sure they understand with no ambiguity, but also with ensuring they know exactly when and how you'll be in touch. This applies especially to teams that aren't familiar with how you work. Record everything. Get everything in writing." (Manager Firm 13)
Tolerating Responses	
C: Internal resistance R: Acceptance of trade-off	"Outsourcing or off-shoring is something that every major company is doing. As the management team, you come to see that we're doing this to be viable - viable now and into the future. From a business point, it's the right thing to do. Nevertheless, everyone realizes that there are some trade-offs that are being made that can be personally hard." (Manager Firm 5)
C: Poaching practices R: 'Bank on that'	"You also have to be banking on the fact that when we go to certain countries especially emerging markets where you're seeing the rapid growth or you're bringing work into the country, the attrition rates become real crazy… and companies from outside the country come in and try to steal experienced people. You have to bank on that." (Manager Firm 4)
C: Loss of productivity R: 'Discount productivity'	"Sometimes it comes down to how well they speak English and if they completely understand what we want them to build and the specifications of what we are asking. We can't take one developer here and replace them with one developer there, and get the same type of output so you have to discount productivity you get, it's not one to one." (Manager Firm 6)
Relocating Responses	
C: Lack of skills in India R: Move to Ukraine	"Initially Ukraine was selected because it was referred to [us] as being high quality at a good cost. […] It did surprise us that the Indian technical talent is not where it was expected to be, resulting in their inability to meet deliverables. […] The business processes and cultural fit wasn't there which led to them being let go. As a result we are now looking to grow Ukraine offshoring and outsource to places where there is a better process and cultural fit." (Manager Firm 2)
C: Service disruption in Cairo R: Temporary relocation	"I have about 100 people in Cairo. We did shut down for about 3 weeks. […] One of the things we learned when looking at each center and challenges is that we have to have options especially if a center has to be shut down if a catastrophe strikes. So we have a phone system that is cloud based and was implemented this year. With no effort, I can automatically cut over to any center and shut one down." (Manager Firm 4)

Figure 1: Overview of Propositions and Relationships between Factors